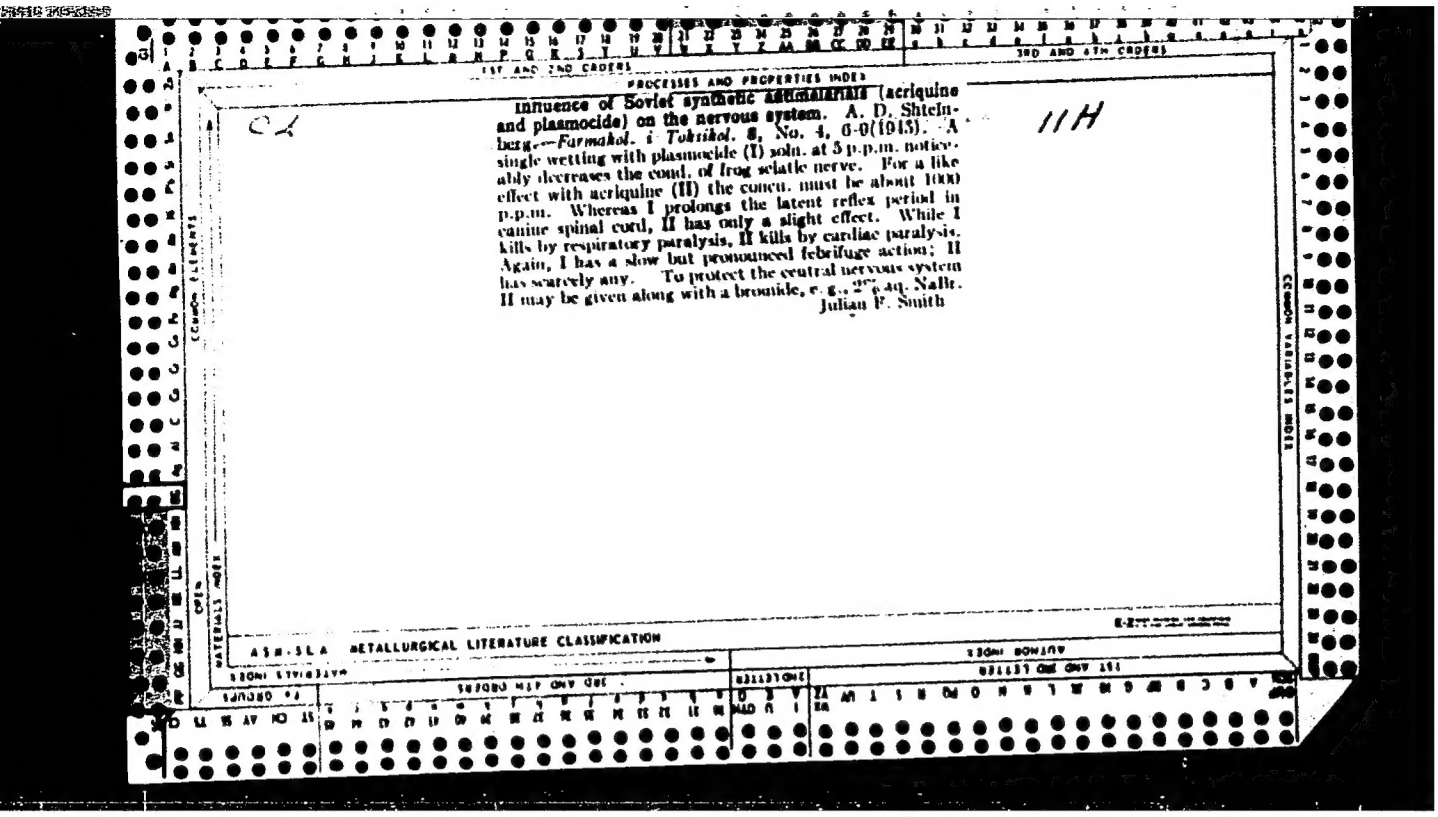
[illegible], P. S. A. R.

[illegible]., Chair Pharmacology, Rostov-on-Don Medical Inst., -1939-41-. Dir., Kostov Dist. Tropical Inst., -1941-. "Studies on the Pharmacology of Plasmocide: 1. Effects upon the Cardio-Vascular and Nervous Systems," Farmakol. i Toksikol., 2, No. 2, 1939; "The Effect of Aeriochine and Plasmocide on the Hepatic Function," ibid., 4, No. 3, 1941.



PROCESSES AND PROPERTIES INDEX

Influence of Soviet synthetic antimalarials (acriquine and plasmocide) on the nervous system. A. D. Shtein-berg.—*Farmakol. i Toksikol.* 8, No. 4, 6-9(1945). A single wetting with plasmocide (I) soln. at 5 p.m. notice-ably decreases the cond. of frog sciatic nerve. For a like effect with acriquine (II) the concn. must be about 1000 p.p.m. Whereas I prolongs the latent reflex period in canine spinal cord, II has only a slight effect. While I kills by respiratory paralysis, II kills by cardiac paralysis. Again, I has a slow but pronounced febrifuge action; II has scarcely any. To protect the central nervous system II may be given along with a bromide, e. g., 2% aq. NaBr.

Julian P. Smith

11H

APPROVED FOR RELEASE: 07/13/2001 CIA-RDP86-00513R001550020011-6"

SHTEYNBERG, A.D.

Effect of diuretics on urination in certain experimental kidney diseases. Farm. i toks. 22 no.3:275 My-Je '59. (MIRA 12:7)

1. Kafedra farmakologii (zav. - prof. A.D. Shteynberg) Karagandinskogo meditsinskogo instituta.

(THEOBROMINE, eff.
theobromine-sodium salicylate mixture on urination in exper. kidney dis. (Rus))
(DIURETICS, MERCURIAL, eff.
mersalyl sodium-barbital mixture on urination in exper. kidney dis. (Rus))
(BARBITURATES, eff.
barbital-mersalyl sodium mixture on urination in exper. kidney dis. (Rus))
(KIDNEY DISEASES, exper.
eff. of barbital-mersalyl sodium & theobromine-sodium salicylate mixtures (Rus))

SHTEYNBERG, A.D.

Influence of synthomycin and levomycetin on conditioned reflex activity in dogs. Farm. i toks. 24 no.4:394-397 Jl-Ag '61. (MIRA 14:9)

1. Kafedra farmakologii (zav. - prof. A.D.Shteynberg) Karagandinskogo gosudarstvennogo meditsinskogo instituta.
(CONDITIONED RESPONSE) (CHLORMYCETIN)

SHTEYNBERG, A.I.
CA

11H

Alimentary heliotrope toxicosis A. I. Shteinberg and Yu. I. Shillinger. *Gigiena i Sanit.* 1950, No. 6, 21-7. Feeding 18.35 g./kg. (6 g. daily) heliotrope seeds to cats leads to death within 5-14 days. Expts. with sublethal amts. in cats indicated that the alkaloid heliotrine is the active principle. Expts. with monkeys gave analogous results. The characteristic symptoms are those of toxic hepatitis with ascites, brought about by progressive development of hyperemia, hemorrhages, degenerative changes in the liver, and cirrhosis, along with an attack on all the internal organs of major importance. G. M. K.

CA SHTEYNBERG, A. I. 12

Basic hygienic principles of coloring food products. A. I. Shteinberg. *Gigiena i Sanit.* 1950, No. 11, 28-32.—History and practice of use of org. coloring matter in food are briefly covered, as is the toxicology of the common substances used. The current USSR laws covering such materials are outlined. G. M. Kosolapoff

1951

SHTEYNBERG, A. L.

PA 19T35

USSR/Radio - Relay Stations
Radio - Relay equipment

Jan 1946

"The Operation of a Booster Station," A. L. Shteynberg, 4 pp

"Vestnik Svyazi - Elektro Svyaz'" No 1 (70)

Discusses security measures against damage to communications lines. Present exploitation of the available lines of communications and examples of logs which have to be kept by these radio booster stations.

19T35

KRISTAL'NYY, Vladimir Samoylovich. Prinimal uchastiye GENIN, L.S.. SHTEYNBERG, A.L., retsenzent; SMIRYAGIN, A.G., otv.red.; BOGACHEVA, G.V., red.; SHEFER, G.I., tekhn.red.

[Long-distance telephone communications] Ekspluatatsiia mezhdugorodnoi telefonnoi sviazi. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1959. 182 p. (MIRA 13:1)
(Telephone)

TINTMAN, Nukhim Izrailevich; GUSEV, Simon Stepanovich; FAT'KIN, D.F., kand. tekhn. nauk, retsenzent; SHTEYNBERG, A.L., inzh., retsenzent; YAKUB, Yu.A., kand. tekhn. nauk, otv. red.; ULANOVSKAYA, N.M., red.; MARKOCH, K.G., tekhn. red.

[Wire communications]Provodnaia sviaz' Moskva, Sviaz'izdat, 1962. 290 p. (MIRA 16:1)
(Telephone) (Telegraph) (Teletype)

SHTEYNBERG, Aleksandr L'vovich, inzh.; SHTEYNBOK, G.Yu., inzh., ved. red.; GONCHAROV, I.V., kand. tekhn. nauk, red.; SOROKINA, T.M., tekhn. red.

[Upe-1 unit]Ustanovka UPE-1. Moskva, Filial Vses. in-ta nauchno-tekhn. informatsii, 1958. 8 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 34. No.P-58/10) (MIRA 16:2)
(Electronic instruments)
(Electric instruments—Testing)

[redacted], L. I.

Mor., Eastern Sci. Res. Inst. Fn. Metallurgical Industry, -c1949-. "Decreasing Electric Power Consumption in the Preparation of Pulverized Coal by Grinding Lignite in Ball Mills," Prom. Energet., No. 2, 1949.

SHTEYNBERG, A. M.

"Ways of Accelerating the Underground Discharge Operations During Deep Core Drilling in the Don Basin." CandTech Sci, Moscow Geological Prospecting Institute imeni Sergo Ordzhonikidze, 29 Dec 54. (VM, 21 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: SUM No.556, 24 Jun 55

KULICHIKHIN,N.I.; SHTEYNBERG,A.M.

Determining optimal speed relationships in raising the tool used in boring deep exploratory boreholes. Trudy MGRI no.28:131-137'55. (Boring) (MLRA 8:6)

KULICHIKHIN, N.I.; SHTEYNBERG, A.M.

Efficient draw works for deep exploratory boring. Razved.i okh. nedr 22 no.1:28-32 Ja '56. (MLRA 9:5)
(Boring machinery)

TROFIMOV, V.M.; SHTEYNBERG, A.M.

Using modernized BK-M core barrels for drilling in the Donets Basin. Razved.i okh.nedr.22 no.3:17-22 Mr '56. (MIRA 9:7)
(Donets Basin--Boring machinery)

TROFIMOV, V.M.; SHTEYNBERG, A.M.

Study of core bits used for boring in the central Donets Basin.
Trudy MGRI 30:115-123 '56. (MLRA 9:11)
(Boring machinery) (Donets Basin--Boring)

SHTEYNBERG, A.M.

Evaluating the economic efficiency of exploratory drilling derricks. Izv. vys. ucheb. zav.; geol. i razv. 1 no.8:126-128 Ag '58. (MIRA 12:9)

(Cranes, derricks, etc.)

SHTEYNBERG, A.M.; TROFIMOV, V.M.

Sinking distance in one pass in connection with the drillability of rocks. Izv.vys.ucheb.zav.; geol.i razv. 2 no.5: 123-127 My '59. (MIRA 12:12)

1. Moskovskiy geologorazvedochnyy institut im. S.Ordzhonikidze, i Krasnoyarskiy institut tsvetnykh metallov i zolota im. M.I. Kalinina.

(Boring)

SHTEYNBERG, A.M.

Practices of ship division into planning and accounting units.
Trudy NTO sud.prom. 8 no.2:101-102 '59. (MIRA 13:5)
(Shipbuilding)

TROFIMOV, V.M.; SHTEYNBERG, A.M.

Methods for increasing the efficiency of test deep drilling.
Trudy MGRI 34:140-144 '59. (MIRA 13:12)
(Boring)

PAL'YANOV, P.F.; SHTEYNBERG, A.M.; Prinimali uchastiye: ZINENKO, V.P.; KIRSANOV, A.N.; KULICHIKHIN, N.I., prof., red.

[Drilling holes; for the specialty "Hydrogeology and engineering geology" in prospecting and mining institutes and departments] Burenie skvazhin; dlia spetsial'nosti "Gidrogeologiia i inzhenernaia geologiia geologorazvedochnykh gornykh institutov i fakul'tetov. Moskva, Nedra, 1964. 354 p. (MIRA 17:12)

DOLGANOV, Ye.A.; SHTEYNBERG, A.M.; BARSKIY, M.D.

Effectiveness of the classification process. Izv. vys. ucheb. zav.; khim. i khim. tekh. 8 no.3:499-503 '65.
(MIRA 18:10)

1. Ural'skiy politekhnicheskiy institut imeni Kirova i Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskoy teplotekhniki.

BORDVSKIY, I.B.; SHTEYNBERG, A.N.; BUGULOVA, V.V.

Quantitative determination of Bi, Pb, Zn and Cd in silicon by the sublimation method with preliminary treatment for sensitivity. Trudy.Inst. met. no.3:283-288 '58. (MIRA 12:3)
(Silicon--Analysis) (Nonferrous metals--Spectra)

GAYDOVSKIY, Vladimir [Hajdovský, Vladimir), RNDr; SHTEYNBERG, A.N., [translator]; ANTONOVA, V.I. [translator]; OSHCHEPKOV, P.K., doktor tekhn.nauk, red.; GOLYATKINA, A.G., red.izd-va; ATTOPOVICH, M.K., tekhn.red.

[Using X rays and γ rays in materials testing] Issledovanie materialov rentgenovymi i γ-luchami. Pod red. P.K.Oshchepkova. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1959. 314 p. [Translated from the Czech](MIRA 12:5)
(Gamma rays--Industrial applications)
(X rays--Industrial applications)

PONOMAREV, A.I.; SHTEYNBERG, A.N.; NAGIBIN, V.S.; YAKOVLEV, P.Ya.

"Methods of chemical, physicochemical, and spectral analysis of raw materials, metals, and slags at metallurgical plants" by V.D.Konkin, G.A.Klemeshov, O.I.Nikitina. Reviewed by A. O. Ponomarev and others. Zav.lab. 28 no.5:638-639 '62.
(MIRA 15:6)

(Metallurgical analysis) (Konkin, V.D.) (Klemeshov, G.A.) (Nikitina, O.I.)

SHTEYNBERG, A.N.

Quantitative spectrum analysis of pure silicon carbide by the vaporization method. Trudy Inst. met. no.11:243-254 '62.
(MIRA 16:5)

(Silicon carbide--Spectra) (Evaporation)

SHTEYNBERG, A.N.

Method of vaporization in spectrum analysis. Trudy Inst. met. no.11:237-242 '62. (MIRA 16:5)
(Spectrum analysis) (Evaporation)

SHTEYNBERG, A.N.

Direct spectral determination of boron in silicon. Trudy Inst. met. no.11:229-236 '62. (MIRA 16:5)
(Silicon--Analysis) (Boron--Analysis)

SHTEYNBERG, A.N.

Spectral analysis of pure metallic tungsten by means of discharges in a hollow cathode. Metod. anal. khim. reak. i prepar. no.7:77-81 '63. (MIRA 17:5)

1. Institut metallurgii imeni Baykova.

SHTEYNBERG, A.M.

Mortar for crushing solid crystals. Zav. lab. 29 no.8:1013-1014 '63. (MIRA 16:9)

1. Institut metallurgii imeni A.A.Baykova.
(Silicon carbide) (Spectrum analysis)

SHTEYNBERG, A.N.

Using a source with a hollow cathode for mass spectrum analysis.
Zav. lab. 29 no.9:1084 '63. (MIRA 17:1)

1. Institut metallurgii imeni A.A. Baykova.

ACCESSION NR: AP4013301 S/0032/64/030/002/0178/0180

AUTHORS: Kalinnikov, V. T.; Shteynberg, A. N.

TITLE: Spectral analysis of titanium dioxide and silicon carbide by the evaporation method

SOURCE: Zavodskaya laboratoriya, v. 30, no. 2, 1964, 178-180

TOPIC TAGS: spectral analysis, titanium dioxide, silicon carbide, carborundum, evaporation method, evaporator, impurity, impurity removal, purification, spectrograph, kinetics of vaporization, titanium, graphite

ABSTRACT: The authors used the vaporization method to distill the impurities from samples of metallic titanium and silicon carbide (carborundum), followed by determination using an ISP-28 spectrograph in an electric arc. The vaporizer was an electric furnace with a 16 x 17 x 20 cm chamber, where 50 mg of the specimens were placed in graphite beakers, then heated to the desired temperature. Since metallic titanium was difficult to grind, these samples were converted to titanium dioxide by heating in air at 800-900C, and then were mixed with one third their weight of graphite powder to prevent spattering in the vaporizer. It was found that

Card 1/2

ACCESSION NR: AP4013301

at 1500C the vaporization of Bi, Pb, and Sn occurred, followed by that of Fe, Mn, Si, and Cu at 2000C. Mg, Al, and Cr began to evaporate at 2200C. It took 120 seconds to vaporize the elements of the first group, another 120 seconds for the second, and an additional 150 seconds to vaporize the metals of the third group. The samples of silicon carbide in the form of 2-4-mm crystals, were analyzed by a similar technique, because of the failure to get results by Morrisson and Rupp's method ("Silicon Carbide, a high temperature semiconductor", Pergamon Press, 1960). It was found that at 1850C nearly all the Fe, Cu, Mn, Pb, P, and Sb were distilled out within 3 minutes. The average quadratic relative error of a single determination of the impurities was 20-25%. L. M. Ivantsov and B. I. Kostin participated in the construction of the evaporator. Orig. art. has: 3 charts

ASSOCIATION: Institut metallurgii im. A. A. Baykova (Institute of Metallurgy)

SUBMITTED: 00 DATE ACQ: 26Feb64 ENCL: 00

SUB CODE: ML NO REF SOV: 004 OTHER: 002

Card 2/2

[redacted], A.N.

Portable spectroprojector on the basis of the "mikrofot" apparatus. Zav. lab. 30 no.5:634 '64. (MIRA 17:5)

1. Institut metallurgii imeni A.A. Baykova.

SHTEYNBERG, A.N.

Static volt-ampere and temperature characteristics of a discharge in a hollow cathode. Opt. i spektr. 18 no.1:16-19 Ja '65.
(MIRA 18:4)

BYKOVSKIY, V. I. [illegible] A. N.

L 58716-65 EWT(m)/EPF(n)-2/EPR/EWP(t)/EWP(b)/EWA(h) Ps-4/Peb/Pu-4 IJP(c)
JD/WW/JG

AM5016875 BOOK EXPLOITATION UR/669:543/545+543.42

Ponomarev, A. I., ed.

Chemical and spectrum analysis in metallurgy; a practical handbook (Khimicheskiy i spektral'nyy analiz v metallurgii; prakticheskoye rukovodstvo) Moscow, Izd-vo "Nauka", 1965. 382 p. illus., tables, index. (At head of title Akademiya nauk SSSR. Gosudarstvennyy komitet po chernoy i tsvetnoy metallurgii pri Gosplane SSSR. Institut metallurgii im. A. A. Baykova) Errata slip inserted. 3000 copies printed.

TOPIC TAGS: analysis, chemical analysis, physicochemical analysis, spectral analysis, slag analysis, steel analysis, iron analysis, alloy analysis, pure metal analysis, element determination, rare earth element determination, impurity determination

PURPOSE AND COVERAGE: This book is intended for specialists and workers at scientific-research and plant laboratories. The book describes chemical, physicochemical and spectral methods of analysing slags, steels, irons, various alloys, and some pure

Card 1/5

L 58716-65
AM5016875

14

metals. The determination of rare and rare-earth elements is outlined. Part I of the book deals with the analysis of slags and the determination of basic elements and usual impurities, and describes methods of determining rare-earth elements. Part II deals with the analysis of cast irons and steels and describes the determination of usual components and tungsten and molybdenum in the presence of niobium, as well as the determination of tantalum, niobium and cerium. Part III includes analysis of metallic chromium, niobium, titanium, nickel, and their alloys. Methods of determining cerium, indium, and gallium in metals and alloys are discussed along with the determination of rare-earth elements by applying the chromatographic method. Part IV deals with spectral analysis including photographic and other various methods. The following members of the Institute of Metallurgy participated in the work: A. A. Astanina, V. S. Nagibin, Ye. N. Kunenkova, Yu. I. Bykovskaya, L. I. Veselago, I. A. Golubeva, N. S. Gertseva, A. S. Slavyanskiy, A. N. Shteynberg, N. V. Nikitina, and L. L. Lapchinskaya.

Card 2/3

L 58716-65
AM5016875

8

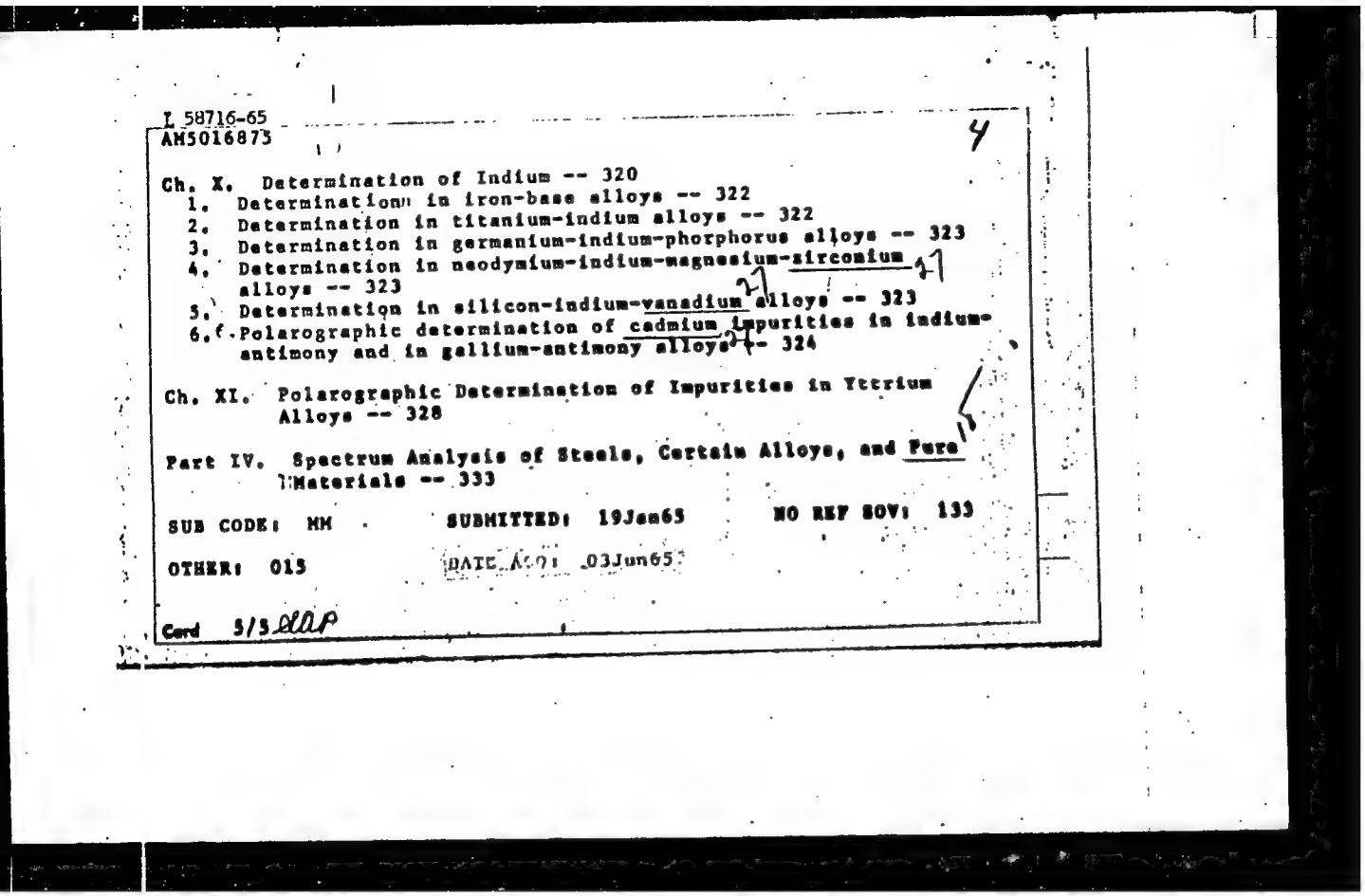
TABLE OF CONTENT [Abridged]:

Card 3/5

L 58716-65

AM6U16875

Card 4/5



L 58716-65
AM5016873

4

SUB CODE: MM SUBMITTED: 19Jan65 NO REF SOV: 133

OTHER: 015 DATE ACC: 03Jun65

Card 5/5 dap

SOKIRYANSKIY, L.F.; SHTEYNBERG, A.N.

Kinetics of the inflow of impurities to discharge plasma in a hot hollow cathode. Zav. lab. 31 no.1:54-56 '65.
(MIRA 18:3)

1. Institut metallurgii imeni Baykova.

L 3151-66 EWT(1)/EWP(e)/EWT(m)/EPF(c)/EWP(i)/ETC/EPF(n)-2/EWG(m)/EPA(w)-2/T/EWP(b) IJP(c) DS/WW/AT/WH

ACCESSION NR: AP5016039 UR/0368/65/002/005/0385/0391

537.525.83

AUTHOR: Shteynberg, A. N. 44,55

47
8

TITLE: Some problems in the use of a hot hollow cathode for spectral analysis 21,44,55

SOURCE: Zhurnal prikladnoy spektroskopii, v. 2, no. 5, 1965, 385-391

TOPIC TAGS: spectrum analysis, 44,55 arc discharge, zinc compound, zirconium compound, graphite

ABSTRACT: Inasmuch as the use of a hot hollow cathode in emission spectral analysis unavoidably necessitates the introduction of the analyzed substance in the cathode, the author examines the influence of the presence of extraneous bodies in the cathode on the behavior of the discharge and on the temperature conditions of the cathode. Thin rods of different materials (graphite and niobium carbide) were introduced into a graphite cathode and the volt-ampere characteristics were measured for the same cathode with and without the rod. The greatest effect was found to be produced by the unequal heating

Card 1/2

L 3151-66

ACCESSION NR: AP5016039

of the rod and of the cathode (in some cases the rod was 750° hotter than the cathode.) The relative coolness of the cathode leads to a decrease in the overall power of the discharge. Various means of effective introduction of the samples in the cathode are discussed and it is shown that cathode sputtering can be appreciably reduced by proper choice of the discharge current. In the case of ZrN cathode, the optimal density is 250 ma/cm^2, and in the case of tungsten cathode it is 600 -- 700 ma/cm^2. Orig. art. has: 4 figures

ASSOCIATION: None

SUBMITTED: 25Jul64 ENCL: 00 SUB CODE: OP

NR REF SOV: 004 OTHER: 003

Card 2/2

AYZENSHTAT, S.Yu., inzh.; BARKAN, V.M., inzh.; KURTSMAN, M.D., inzh.; POZNYAKOV, N.V., inzh.; CHERNYAVSKIY, I.S., inzh.; SHTEYNBERG, A.S., inzh.; MIL'SHTEYN, D.S., inzh., red.; KASHTANOV, F., red.; STEPANOVA, N., tekhn. red.

[Concealed electrical wiring in 1-464A-series large-panel apartment houses] Montazh skrytoi smeniaemoi elektroprovodki v krupnopanel'nykh zhilykh domakh serii 1-464A. Pod red. D.S. Mil'shteina. Minsk, Gos.izd-vo BSSR, Red. proizvodstvennoi litry, 1962. 75 p. (MIRA 15:6)

1. Elektromontazh no.18, turst.
(Electric wiring, Interior)

SHTEYNBERG, A.S., inzh.; SITNIKOV, L.P., red.

[Collection of inventions; concrete and reinforced concrete] Sbornik izobretenii; beton i zhelezobeton. Moskva, Informatsionno-izd. otdel, 1960. 155 p. (MIRA 14:11)

1. Russia (1923- U.S.S.R.) Komitet po delam izobreteniy i otkrytiy. (Concrete) (Concrete reinforcement)

MIKHAYLOVSKIY, D.S., inzh.; SHTEYNBERG, A.S.

Intensifying temperature conditions in casting reinforced concrete products in molds. Bet.i zhel.-bet. no.1:31-33 Ja '60. (MIRA 13:5)
(Precast concrete)

GOLUBOVICH, S.R.; FINK, L.Ye.; TUMARKIN, P.I., inzh.; SHTEYNBERG, A.S., inzh.; GRIZAK, Yu.S., inzh., retsenzent; OTDEL'NOV, P.V., inzh., red.izd-va; TIKHANOV, A.Ya., tekhn. red.

[New equipment for manufacturing building materials] Novoe oborudovanie dlia proizvodstva stroitel'nykh materialov; spravochnoe posobie. Moskva, Mashgiz, 1963. 247 p. (MIRA 17:1)

SHTEYNBERG, A.S.

Terminology of vegetative disorders in neuroses. Zhur.nevr. i psikh. 55 no.8:639-640 '55. (MLRA 8:10)
(NEUROPATHOLOGY--TERMINOLOGY)

SHTEYNBERG, A.S.

Dispensary treatment of neurological patients by subcutaneous injection of oxygen. Zdrav. Kazakh. 18 no. 2:54-57 '58.
(MIRA 13:8)

1. Iz gorodskoy ob"yedinennoy bol'nitsy prompredpriyatiy g. Petropavlovska.
(NERVOUS SYSTEM—DISEASES)
(OXYGEN—THERAPEUTIC USE)

SHTEYNBERG, A.S.

Thermoanemometer with a linear scale. Trudy VNIITP no.18: 195-199 '61. (MIRA 17:1)

GORBOVETS, Mark Naumovich, inzh.; SHTEYNBERG, Aleksandr Samuilovich; BEGMA, Vasiliy Filippovich, inzh.

[Practices in manufacturing large-panel elements for two-story apartment houses in rural areas] Opyt proizvodstva krupnopanel'nykh elementov dvukhetazhnykh zhilykh domov dlia sel'skikh raionov. Moskva, Stroiizdat, 1964. 28 p. (MIRA 17:12)

1. Moscow. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu.

SHTOKALO, A.S.

Modification of the process of equalizing descents for the generalized Chebyshev minimax problem. Dop. AN URSR no.3:318-321 '63.
(MIRA 17:10)

1. Kiyevskiy politekhnicheskiy institut. Predstavleno akademikom AN UkrSSR I.Z. Shtokalo.

SHTEYNBERG, Abram Samoylovich; EGLE, B., red.

[Sheet metal work in the radioelectronic equipment industry] Listovaia shtampovka v radioelektronnoi promyshlennosti. Riga, Latviiskoe gos. izd-vo, 1964. 54 p. (MIRA 18:1)

SHTEYNBERG, A.S.

Formulas for practical harmonic analysis and certain problems for estimates of uniform approximations of functions. Nauk.zap.Kiev.un. 8 no.4:105-110 '49. (MLRA 9:10)
(Harmonic analysis) (Fourier's series)

SHTEYNBERG, A.S.; HNYEDENKO, B.V., diysnyy chlen.

On the best uniform approximation for a system of incompatible linear equations and a method of compensation-gradient corrections. Dop.AN URSR no.3:167-173 '52. (MLRA 6:9)

1. Akademiya nauk Ukrayins'koyi RSR (for Hnyedenko).
(Approximate computation)

SHTEYNBERG, A.S.

SHTEYNBERG, A.S. -- "Several Methods of Solving the Problem of the Best Uniform Approximation for a System of Nonadjoin Linear Equations." Cand Phys-Math Sci, Leningrad State U, Leningrad 1953. (Referativnyy Zhurnal--Materatika

SO: SUM 168, 22 July 1954

SHTEYNBERG, A.S.

Divided difference of function on a system of deviation points of the Chebyshev polynomial in connection with certain applications. Izv.vys.ucheb.zav.;mat. no.1:218-226 '60. (MIRA 13:6)

1. Kiyevskiy politekhnicheskiy institut.
(Polynomials)

28706
S/021/61/000/008/001/011
D210/D303

16.5200

AUTHORS: Remez, Ye. Ya., Corresponding Member, AS UkrSSR, and Shteynberg, A.S.

TITLE: On some extremum problems of the generalized Chebyshev type and on the method of equalizing descents

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 8, 1961, 983-989

TEXT: Initially, problems of the type

$$\sup_{z\in E} \left| F_n(z;x) - f(z) \right| = \sup_{z\in E} \left| \sum_{j=1}^{n} x_j g_j(z) \right| = \text{funct.}(x)=\min \qquad (1)$$

with restrictive conditions

Card 1/4

On some extremum problems ...

$$X_v(x) \equiv \omega_v(x) + l_v \equiv \sum_{j=1}^{n} k_{vj}x_j + l_v \leqslant 0 \quad (v=\overline{1,m};\ \sum_{j=1}^{n} |k_{vj}| > 0) \qquad (2)$$

(called conditional minimax problems) are considered. As in the case of free minimax problems, without the restrictive conditions, this problem is reduced, with any degree of accuracy, to a similar one

$$\max_{z \in eH} \left| \sum_{j=1}^{n} x_j g_j(z) - f(z) \right| = \max_{i=\overline{1,H}} \left| \sum_{j=1}^{n} x_j g_j(z_i) - f(z_i) \right| = \min \qquad (1')$$

with the same conditions as in (2), on some corresponding finite

Card 2/4

On some extremum problems ...

set (called a network). The method of equalizing descents is suitable here for numerical construction of solutions. The treatment of this method remains essentially the same if (1') is replaced by a more general quasi-Chebyshev problem of algebraical minimax

$$\max_{i=\overline{1,N}} \bar{\varphi}_i(x) = L(x) = \min, \qquad \bar{\varphi}_i(x) \equiv \varphi_i(x) + b_i \equiv \tag{5}$$

$$\equiv \sum_{j=1}^{n} a_{ij}x_j + b_i$$

If conditions (2) are added one obtains the more general problem of conditional minimax. It is mentioned that problems of Kantorovich type have been treated with the aid of the gradient me-

Card 3/4

thod by G. Sh. Rubinshteyn (Ref. 9: Usp. mat. nauk 10: 4,20 (1955).DAN SSSR 113,987 (1957)) and S.I. Zukhovitskiy (Ref. 10: DAN SSSR 133,20 (1960); the latter does not state that his method is equivalent to one found previously by A.S. Shteynberg (Ref. 6: DAN UrSR 167 (1951)). The algorithm for the solution of the problem (5)-(2) is described and a theorem is established that the process formulated is always finite, i.e. after a finite number of steps either a solution is obtained or a situation reached which means that there is no solution. There are 12 references: 11 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Instytut matematyky AN URSR (Institute of Mathematics, AS UKrSSR); Kyyivs'kyy politekhnichnyy instytut (Politechnic Institute of Kyyev)

SUBMITTED: March 11, 1961

Card 4/4

S/096/62/000/008/002/004
E194/E455

AUTHOR: Shteynberg, A.S., Engineer

TITLE: The influence of flow oscillations on heat exchange between a gas flow and a solid surface

PERIODICAL: Teploenergetika, no.8, 1962, 75-77

TEXT: The present experimental study is of the influence of low-frequency oscillations (up to 50 c/s) of gas flow on heat exchange between flow and particles, when the amplitude of oscillation is considerably greater than the dimensions of the particles. The experimental equipment is described. A thermo-anemometer pick-up was used as sensitive element (particle). It consists of a thermistor type MMT-1, 8 mm long, 2.1 mm diameter wound over with a coil of manganin wire 0.1 mm diameter. The pick-up was located in a flow of air issuing from a nozzle 40 mm diameter and was caused to oscillate in line with the air flow by an electric motor drive. A heating current was passed through the coil on the thermistor and its temperature was measured under various flow conditions. The range of experimental conditions was as follows: Reynolds criterion for steady-state flow

Card 1/2

Re_s = 0 to 540, frequency of oscillation f = 0 to 50 c/s, amplitude of oscillation A = 3 to 10 mm, criterion Gr = 40. The results were worked out relative to the Reynolds criterion for oscillatory motion Re_v

$$Re_v = \frac{4Afd}{\nu} \qquad (2)$$

Graphs of $Nu = Nu(Re_v)$ with Re_s = const. show that quasi-stationary heat transfer occurs over only a small initial range of Re_v = 0 to 20. For values of Re_v over 20 in the range of Re_s = 130 to 540, the rate of heat transfer increases with increase of Re_v but never exceeds by more than 15 to 20% the rate of heat transfer with steady flow without oscillations. It is concluded that a greater increase of heat transfer than 15 to 20% is not to be expected from increased turbulence of gas flow. Moreover, low-frequency pulsations of gas flow in a furnace will only increase heat transfer appreciably for particles which are drawn along by the steady flow. There are 2 figures.

ASSOCIATION: VNII Torfyanoy promyshlennosti
(VNII of the Peat Industry)

SHTEYNBERG, A.S., inzh.

Effect of fluctuations on the heat exchange between a gas flow and the surface of solid bodies. Teploenergetika 9 no.8:75-77 Ag '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut torfyanoy promyshlennosti.
(Heat—Transmission) (Fluid dynamics)

SHTEYNBERG, A.S., kand.tekhn.nauk

Hydraulic resistance of the annular combustion chamber of gas-turbine engines with a draught turn. Avt.prom. 28 no.10:6-9 O '62. (MIRA 15:9)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Automobiles--Engines-(Compressed gas))

SHTEYNBERG, A.S. (Kiyev)

Effective derivation of the best trigonometric approximations.
Ukr. mat. zhur. 15 no.2:173-184 '63. (MIRA 16:9)

SHTEYNBERG, A.S., kand.tekhn.nauk

Using an ignition system with a semiconductor spark plug for starting gas-turbine engines. Avt.prom. 29 no.3:14-17 Mr '63. (MIRA 16:3)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Automobiles, Gas turbine—Ignition)

SHTEYNBERG, A.S., kand.tekhn.nauk

Air cooling of the spark-plug spiral in the combustion chamber of a gas-turbine engine. Avt.prom. 29 no.9:28-31 S '63. (MIRA 16:9)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Spark plugs--Cooling)

SHTEYNBERG, A.S., kand. tekhn. nauk

Air atomization of fuel in the Rover gas-turbine engine. Avt. prom. 29 no.11:45-48 N '63. (MIRA 16:12)

SHTEYNBERG, A.S., kand. tekhn. nauk

Starting characteristics of the "Standard" gas turbine engine. (MIRA 18:2)
Avt. prom. 30 no.11:[illegible] N '64.

L 21031-65 EWT(d)/EPA/EWT(l)/EWP(t)/EPF(c)/EPR/T/EPA(bb)-2 Pz-6/Paa-4/
P-4/Ps-4 BSD/AEDC(b)/ASD(p)-3/AFETR/AFTC(a)/AFTC(p) WW/WE
ACCESSION NR: AP5001145 S/0113/64/000/008/0045/0047

AUTHOR: Shteynberg, A. S. (Candidate of technical sciences)

TITLE: High-energy ignition system for gas turbine engine start-up

SOURCE: Avtomobil'naya promyshlennost', no. 8, 1964, 45-47

TOPIC TAGS: gas turbine, ignition system, combustion chamber, diesel fuel, fuel pump, spark ignition/ SE 15B spark plug

ABSTRACT: The igniting capacity of low-voltage, high-energy ignition systems from the British firm Rotaks was tested. The ignition circuit is given in Fig. 1 on the Enclosure. It has a 12-joule condenser with a 6 μf capacitor. To test its ignition capacity, a 140 × 250-mm combustion chamber was used with GOST 4749-49 diesel fuel at 20C, injected through a single-channel centrifugal fuel injection system. The spark plug was type SE-15B surface discharge device placed inside the chamber at a depth of 25 mm. The stored energy in the condenser was changed in steps from 0.4 to 35.2 joules, and the pulse discharge frequency was kept at 2-4 seconds. Fuel pressure versus flow rate curves were obtained to determine the starting characteristics of the engine. The Rotaks system with a choke coil at 12 joules was equivalent to a 35.2-joule condenser system, because of the extended spark-formation duration (by as

Card 1/3

L 21031-65
ACCESSION NR: AP5001145

much as 100 μ sec) with the subsequent improvement in ignition capacity. Orig. art. has: 4 figures, 1 formula, and 1 table.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 01

SUB CODE: PR, IE NR REF SOV: 000 OTHER: 000

Card 2/3

L 21031-65
ACCESSION NR: AP5001145

ENCLOSURE: 01

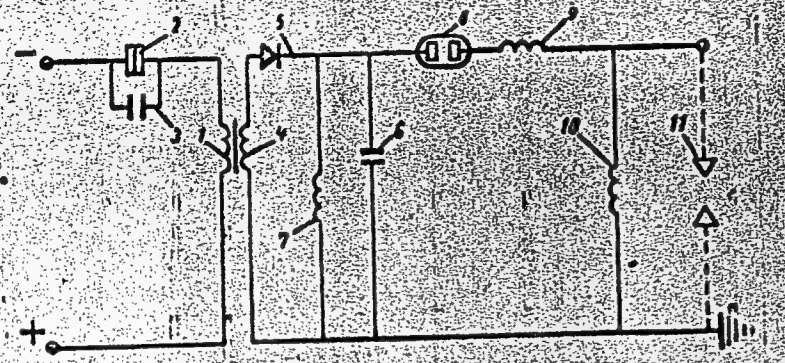


Fig. 1. 1- primary winding, 2- oscillator, 3- condenser, 4- secondary winding, 5- rectifier, 6- 6 μf capacitor, 8- gas-filled spark gap, 11- spark plug, 7, 9, and 10- resistors.

Card 3/3

BAKHMUTSKIY, M.A., inzh.; GORBOVETS, M.N., inzh.; PODSYPANIN, Yu.I., inzh.
SHTEYNBERG, A.S., inzh.

Experimental molding equipment with packet vibration. Stroi. i dor. mash. 9 no.3:29-31 Mr '64. (MIRA 17:6)

L 43729-65 EWT(d)/EPA/EWT(m)/EWP(f)/EPF(n)-2/EPR/T-2/EPA(bb)-2/EWA(c)
ACCESSION NR: AR5009482 Paa-4/Ps-4 WW S/0124/65/000/003/B049/B049

28
27
B

SOURCE: Ref. zh. Mekhanika, Abs. 3B315

AUTHOR: Shteynberg, A.S.

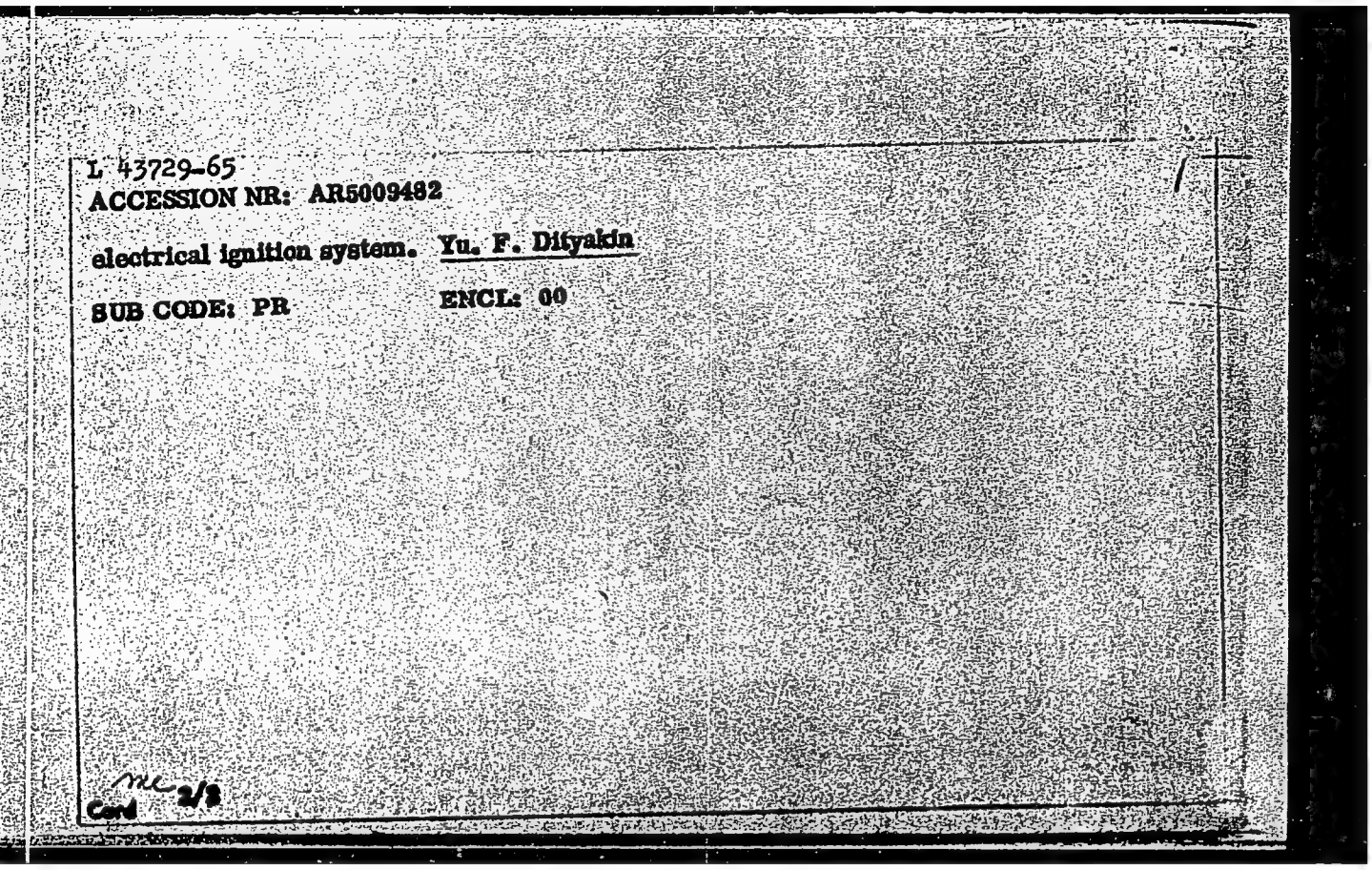
TITLE: A study of the combustion chamber of the Rover 1S/60 gas turbine

CITED SOURCE: Tr. Tsentr. n.-i. avtomob. i avtomotorn. in-ta, vyp. 67, 1964, 64-79

TOPIC TAGS: gas turbine, turbine combustion chamber, universal air injector, turbine ignition system, turbine driven generator Rover 1S/60 turbine

TRANSLATION: The author presents the methodology and results of an experimental analysis of the combustion chamber in a gas turbine designed to drive the generator of a land-based airport power plant. The author describes the design of the chamber, the electrical ignition system and the pressure operated atomizer. Hydraulic drag properties of the chamber are defined for the cold air scavenging and combustion stages. The relationship of fuel consumption to pressure and the base angle of the atomized fuel stream at various air and fuel pressures are defined as part of the analysis of the injector system. The pressure of the atomizing air was varied in analyzing the starting characteristics of the chamber. A special experimental chamber was used to study the

Card 1/2



L 43729-65
ACCESSION NR: AR5009482

electrical ignition system. Yu. F. Dityakin

SUB CODE: PR ENCL: 00

Card 2/2

L 19605-65 EWT(m)/EPF(c)/EPR/EWP(j) Pc-4/Pr-4/Ps-4/Pa-4 RPL/AFWL/AEDC(a)
RM/WW

ACCESSION NR: AP5003152 S/0020/64/158/002/0448/0451

AUTHOR: Shteynberg, A. S.; Sokolova, N. A.

TITLE: Linear pyrolysis of condensed substances

SOURCE: AN SSSR. Doklady, v. 158, no. 2, 1964, 448-451

TOPIC TAGS: pyrolysis, macromolecular chemistry, high temperature effect, heat of decomposition, thermochemistry

ABSTRACT: The term linear pyrolysis is customarily used for a steady-state unidimensional propagation of the reaction front of thermal decomposition under conditions when the condensed substance, situated at some distance from the reaction zone, does not have time to be heated to the temperature at which the reaction proceeds at an appreciable rate. The principles of linear pyrolysis must be known to determine the temperature above which the results of experiments investigating the kinetics of thermal decomposition of a substance in a medium with constant temperature become incorrect. The authors studied the character of the decomposition reaction in the pyrolysis of high-molecular compounds (using polymethyl methacrylate as an example), comparing

Card 1/2

L 19605-65

ACCESSION NR: AP5003152

the temperatures of the heated plate at the site of contact with the surface of the substance and of the surface of the substance, and evaluating the possibilities of the method of linear pyrolysis for determining the kinetic constants of the high-temperature decomposition of condensed substances. The kinetic constants were determined. The authors conclude that in experiments on linear pyrolysis of high-molecular substances of the polymethyl methacrylate type, the decomposition reaction proceeds in a layer of finite thickness, and in a first approximation the activation energy of the observed process is half of the true activation energy of thermal decomposition; the surface temperature of the substance is close to the temperature of the plate within a broad range of pyrolysis rates.

"The authors thank B. I. Brounshteyn, O. M. Todes, I. I. Paleyev, and A. F. Belyayev for their help in the work." 1 Orig. art. has: 1 figure, 7 formulas, 3 graphs.

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

SUBMITTED: 01Apr64 ENCL: 00 SUB CODE: GC, TD

NO REF SOV: 004 OTHER: 007 JPRS

Card 2/2

GORTOVETS, M.N., inzh.; EHTEYNBERG, A.S., inzh.; RYABOV, L.I., inzh.

Automatic control of maximum loading of belt conveyors of loose materials. Stroi. i dor. mash. 10 no.6:16-17 Je '65.
(MIRA 18:8)

[illegible], A.S., [illegible]NA, R.Z.; SOKOLOV, I.D.

Drying insulating peat slabs by the pressure-drop method. Inzh.-fiz. zhur. 8 no.6:730-734 Je '65. (MIRA 18:7)

1. Institut torfyanoy promyshlennosti, Leningrad.

GORBOVETS, M.N., inzh.; TUMARKIN, P.I., inzh.; SHTEYNBERG, A.S., inzh.

Manufacturing external panels for the 1-464A-series homes in packet molds. Stroi. i dor. mash. 9 no.12:27-28 D '64.
(MIRA 18:3)

GORBOVETS, M.N., inzh.; RYABOV, L.I., inzh.; SHTEYNBERG, A.S., inzh.

Device for checking the thickness of molding compartments.
Stroi. i dor. mash. 10 no.1:26-28 Ja '65 (MIRA 18:2)

L 21183-65 EWG(j)/EWT(l)/EWP(e)/EWG(k)/EWT(m)/EPA(sp)-2/EPF(c)/EPF(n)-2/EPR/T/
EWA/EWP(b) Pz-6/Pab-10/Pr-4/Ps-4/Pu-4 IJP(c)/SSD/AEDC(a)/AFWL/USD IWH/WW/AT/
ACCESSION NR: AP5003019 WH S/0051/65/018/001/0016/0019

AUTHOR: Shteynberg, A. N.

TITLE: Static voltage-current and temperature characteristics of a discharge in a hollow cathode

SOURCE: Optika i spektroskopiya, v. 18, no. 1, 1965, 16-19

TOPIC TAGS: gas discharge, voltage current characteristic, temperature characteristic, hollow cathode discharge, thermionic emission, work function

ABSTRACT: The voltage-current characteristics of helium and neon discharges in a hollow cathode were measured at a wide range of pressures. The measurements were made at temperatures at which thermionic emission plays an appreciable role. To determine the influence of the work function of the cathode material on the characteristics, cathodes of identical size were made from graphite and zirconium nitride. The column densities ranged from 25 to 500 mA/cm^2. The apparatus employed was described by the author elsewhere (Coll. "Pribory dlya khimicheskikh i fiziko-khimicheskikh issledovaniy" [Instruments for Chemical and Physicochemical

Card 1/2

L 21183-65

ACCESSION NR: AP5003019 O

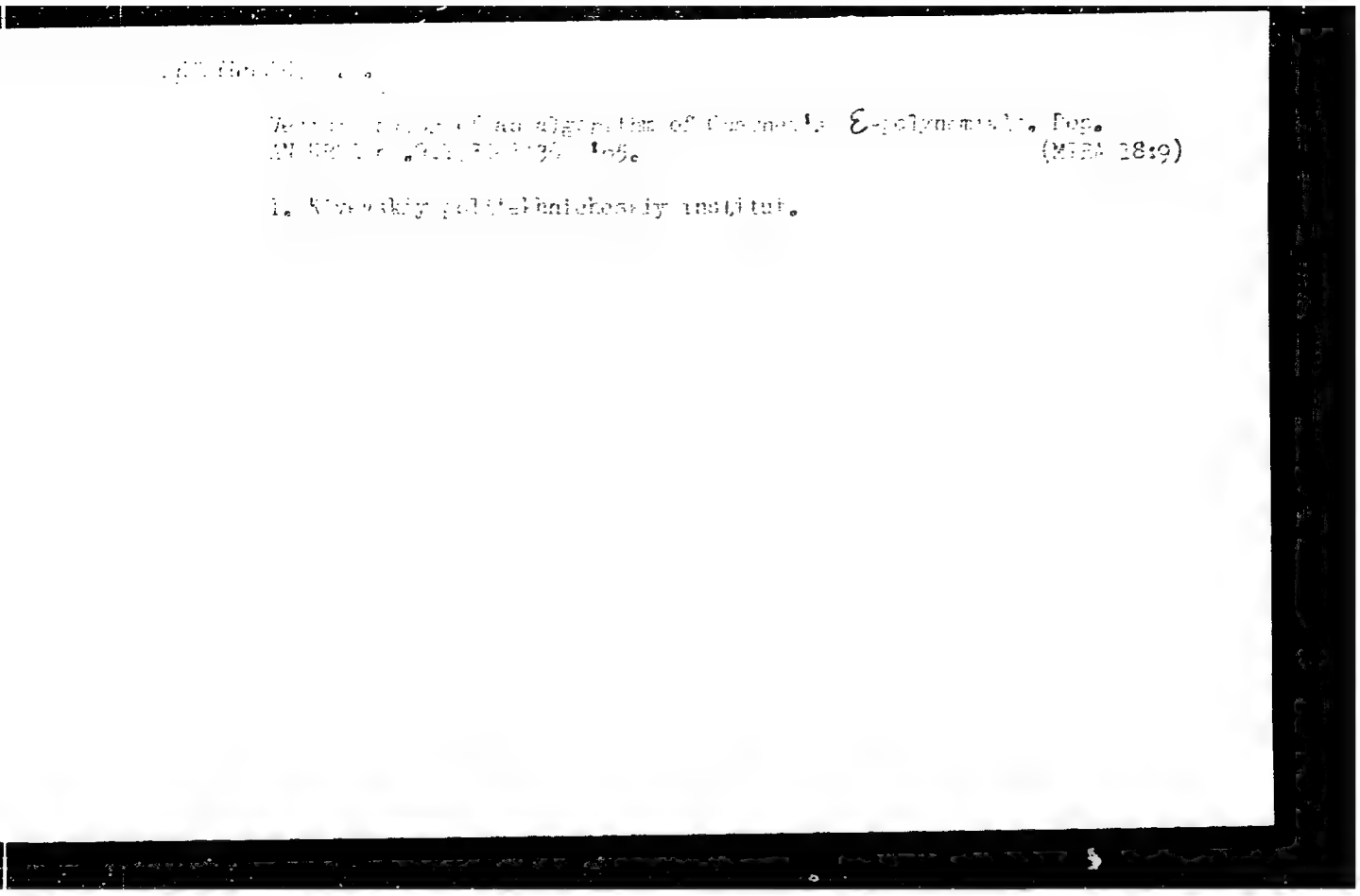
Research7, no. 37-63-732/4, GOSINITI, 1963). A typical set of voltage-current characteristics and the hollow-cathode dimensions are shown in Fig. 1 of the enclosure. Curves of the power vs. discharge current and of the temperature vs. discharge current are also presented. The results indicate that the gas pressure is not a critical parameter with respect to the cathode temperature. The temperature is greatly affected by the work function of the cathode material, and a decrease in the work function can decrease the discharge power (for constant current) by a factor of several times, thereby reducing the cathode temperature. Thus, the cathode temperature can reach 2,000° in the case of the graphite cathode (work function 4.5 eV) and 1500--1600° in the case of ZrN (work function 2.9 eV). There was no noticeable difference between discharges in helium and neon. Orig. art. has: 7 figures.

ASSOCIATION: None

SUBMITTED: 08Feb64 ENCL: 01 SUB CODE: OP, EE

NR REF SOV: 009 OTHER: 005

Card 2/3



L 23274-66 EWT(m) WW/JW/JWD

ACC NR: AP6012677 SOURCE CODE: UR/0170/66/010/004/0482/0486

AUTHOR: Shteynberg, A. S.; Ulybin, V. B.; Barzykin, V. V.; Merzhanov, A. G.

ORG: Branch of the Institute of Chemical Physics, AN SSSR, Moscow Oblast (Filial Instituta khimicheskoy fiziki AN SSSR)

TITLE: Ignition of condensed substances at a constant surface temperature

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 10, no. 4, 1966, 482-486.

TOPIC TAGS: ignition delay, condensed explosive, surface temperature, pyroxylin

ABSTRACT: To verify the previously postulated theory of the ignition of condensed explosives (Averson, A. E., Barzykin, V. V., Merzhanov, A. G. IFZh, 9, No. 2, 1965), the ignition of pyroxylin No. 1 charges having a constant initial surface temperature (T_i = 255—369K) by contact with an aluminum block with a varying temperature (T_0 = 485—525K) was studied experimentally using a specially developed experimental unit (see Fig. 1). The initial temperature of the pyroxylin was set by a thermostat, and the temperature of the igniter was set by a current control system. The ignition delay t_z was visually observed

Card 1/4 UDC: 536.46

L 23274-66
ACC NR: AP6012677

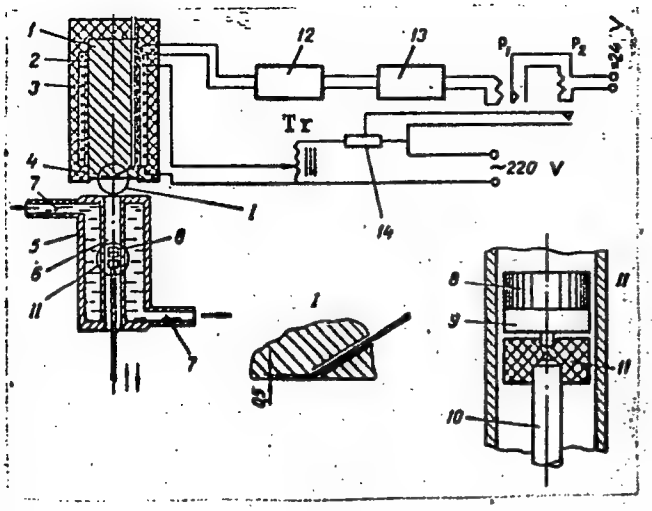


Fig. 1. Experimental unit for studying the ignition of condensed explosives by a hot body

1 - Aluminum block (igniter); 2 - Pt resistance thermometer; 3 - heating element; 4 - Pt—Pt-Rh thermocouple; 5 - thermostat; 6 - steel cylinder; 7 - jacket with heat transfer agent; 8 - charge; 9 - textolite plate; 10 - lifting device; 11 - ebonite sleeve; 12, 13, 14 - current control system; Tr - transformer.

Card 2/4

L 23274-66

ACC NR: AP6012677

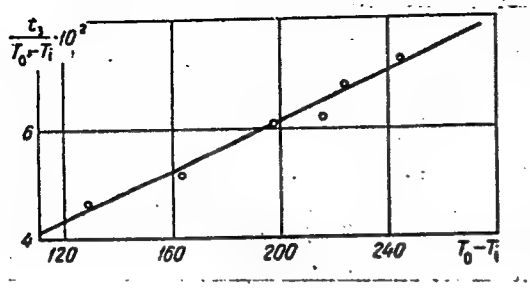


Fig. 2. Dependence of the ignition delay time on the initial temperature

($t_з$ in sec; T_0-T_i in °K; T_0 = 489K)

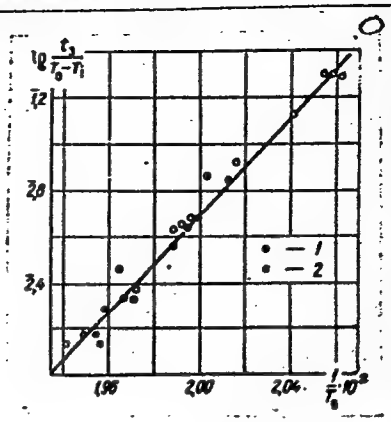


Fig. 3. Dependence of the ignition delay time on the temperature of the igniter

1 - Explosive charge 12 mm in diameter; 2 - charge 18 mm in diameter; ($t_з$ in sec; T_0 in °K; T_i = 293—298K)

Card 3/4

L 23274-66

ACC NR: AP6012677

2

and recorded using a stopwatch. The temperature of the ignition block was varied to obtain an ignition delay of 3—20 sec. The experimental data were treated by an equation derived by mathematical transformation of the published theoretical equation for t_z. The graphed results (see Fig. 2 and Fig. 3) show satisfactory agreement between the theoretical and the experimental data. The activation energy calculated from the graphs was found to be 200 kj/mole. The authors thank B. M. Dmitriyev and O. A. Kochetov for their assistance in setting up the apparatus. Orig. art. has: 3 figures and 3 formulas. [PS]

SUB CODE: 19/ SUBM DATE: 31Aug65/ ORIG REF: 004/ ATD PRESS: 4235

Card 4/4 UVR

ACC NR: AP6017624 (A) SOURCE CODE: UR/0113/66/000/002/0006/0010

AUTHOR: Shteynberg, A. S. (Candidate of technical sciences)

ORG: NAMI

TITLE: Hydraulic drag in the tangential combustion chamber and gas collector of a gas turbine engine with a radial turbine

SOURCE: Avtomobil'naya promyshlennost', no. 2, 1966, 6-10

TOPIC TAGS: hydraulic resistance, combustion chamber test, gas turbine engine, flow velocity, flow stability, HYDRAULIC DRAG

ABSTRACT: The author studies hydraulic drag in the tangential combustion chamber and gas collector of gas turbine engines with radical turbines. An experimental stand is set up for studying hydraulic drag (see figure 1). Three different types of gas collectors are studied. A figure is given showing the relationship between the various cross sections of gas collector flow zones with respect to the angle of deflection (see figure 2). Hydraulic drag for the stand is calculated on the basis of the individual drag of each element. The hydraulic drag coefficient for the combustion chamber is calculated. The hydraulic drag of the gas collector is determined by its shape. Two series of tests are conducted--with and without combustion. It is shown that the use of a tangential combustion chamber increases overall losses in the gas-

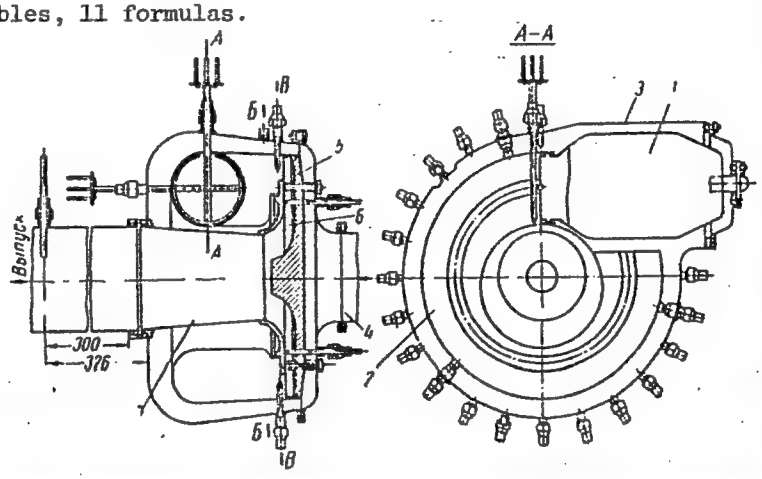
UDC: 621.431.73.056

Card 1/3

L 34847-66

ACC NR: AP6017624

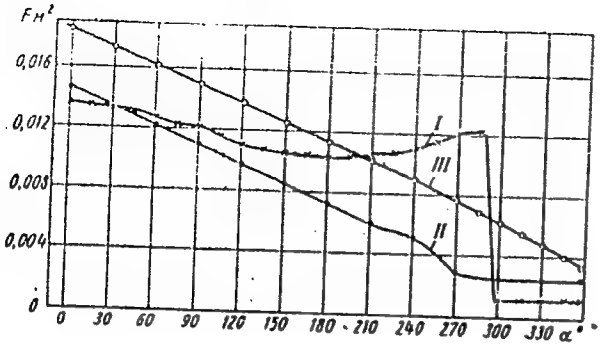
air track which are caused by the additional resistance of the gas collector. In order to reduce drag losses in the gas collector, is should be designed for continuous flow. In order to avoid diffussion losses, velocity in the gas collector has to be constant in the various cross section or increase uniformily toward the exhaust. At the same time, the volume of the gas collector smoothes out flow and partial fuel combustion. A large gas collector prolongs the combustion process by reducing the flow turbulence as a result of reduced velocity in the combustion chamber holes. The resultant drag in the combustion chamber partially offsets the losses introduced by the gas collector. Orig. art. has: 4 figures, 4 tables, 11 formulas.



Experimental stand for studying combustion chambers and type I gas collectors.

Card 2/3

ACC NR: AP0017[illegible]



Variation in the F cross sections of gas collector flow zones with respect to the angles of deflection a.

SUB CODE: 13/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

Card 3/3 FV

ACC NR: AP7001448 (A) SOURCE CODE: UR/0413/66/000/021/0184/0184

INVENTORS: Omirov, V. S.; Krivovyaz, R. M.; Shteynberg, A. S.; Markochev, V. N.; Dvurechenskiy, N. I.

ORG: none

TITLE: A combustion chamber of an automobile gas turbine engine. Class 46, No. 188221 [announced by Central Scientific Research Institute of Automobiles and Automobile Engines (Tsentral'nyy nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 184

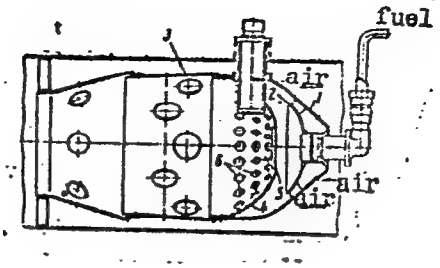
TOPIC TAGS: automotive industry, gas turbine, turbine engine, gas turbine engine, combustion chamber

ABSTRACT: This Author Certificate presents a combustion chamber of an automobile gas turbine engine. The chamber contains a head with a stabilizer and a fire tube (see Fig. 1). To improve the process of mixture forming, a spherical diaphragm with a main central opening and with several auxiliary openings on the periphery of its surface is placed in the head of the chamber between the stabilizer and the fire tube.

Card 1/2 UDC: 621.438.056

ACC NR: AP7001448

Fig. 1. 1 - chamber head; 2 - stabilizer; 3 - fire tube; 4 - diaphragm; 5 - central opening; 6 - auxiliary openings



Orig. art. has: 1 figure.

SUB CODE: 21/ SUBM DATE: 01Jul65

Card 2/2

SHTEYNBERG, B. I.; GALYBIN, N. A.; SHEYN, A. S.; ZHELUDOV, I. S., Engs.

Peat Industry

Measuring the pressure in operating peat briquette presses. Torf. prom. 30, No. 4, 1953.

SO: Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

SHTEYNBERG, B.I.

Seasonal installations for the manufacture of peat briquets and semibriquets. Torf. prom. 35 no. 4:27-28 '58. (MIRA 11:7)

1. Glavnyy inzhener Giprotoppproma.
(Briquets(Fuel))
(Peat)

SHTEYNBERG, B.I.

Medium capacity peat briquetting plant with a diesel electric power plant operating on peat gas. Torf. prom. 35 no. 4:28 '58. (MIRA 11:7)

1. Glavnyy inshener Giprotoppproma.
(Briquets(Fuel))
(Peat)

L 41364-66 EWT(m)/EWP(j)/EWP(t)/ETI IJP(c) JD/JAJ/RM

ACC NR: AP6022437 (A) SOURCE CODE: UR/0064/66/000/004/0037/0040

AUTHOR: Semenova, T. A.; Markina, M. I.; Shteynberg, B. I.; Kozlov, L. I.; Mayorov, I. K.

ORG: none

TITLE: Low-temperature catalyst for the carbon monoxide conversion process

SOURCE: Khimicheskaya promyshlennost', no. 4, 1966, 37-40

TOPIC TAGS: carbon monoxide, industrial catalyst, HYDROGEN, WATER VAPOR

ABSTRACT: The paper discusses the properties of a low-temperature catalyst, developed at GIAP, for the conversion of carbon monoxide and water vapor into hydrogen. The main components of the catalyst are compounds of zinc, chromium, and copper. The presence of sulfur compounds in the gas rapidly reduces the catalyst's activity. Long-term tests showed the operation of the catalyst to be stable over a period of one year. A gradual decrease in activity is due not only to poisoning with sulfur compounds, but also, as indicated by x-ray diffraction analysis, to a gradual recrystallization of the catalyst. The catalyst was then tested in a pilot plant unit with a capacity of 1000 m^3 of gas per hour. The results permit the authors to recommend the industrial use of the low-temperature catalyst studied. Orig. art. has: 7 tables.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 007

Card 1/1 UDC: 661.961.5:66.097.3-974

ACC NR: AP7001364 (A) SOURCE CODE: UR/0413/66/000/021/0031/0031

INVENTORS: Ivanovskiy, F. P.; Shteynberg, B. I.; Semenova, T. A.; Markina, M. I.; Kozlov, L. I. Shutov, Yu. M.

ORG: none

TITLE: A catalyst for gas purification. Class 12, No. 187736 [announced by State Scientific Research and Design Institute of the Nitrogen Industry and of Organic Synthesis Products (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 31

TOPIC TAGS: catalysis, industrial catalyst, gas, zinc oxide, chromium oxide, copper oxide, magnesium oxide, manganese oxide, aluminum oxide, titanium oxide, acetylene, oxygen, nitrogen oxide

ABSTRACT: This Author Certificate presents a catalyst for gas purification. The catalyst contains hydrogen and consists of oxides of zinc, chromium, and copper with admixtures of oxides of magnesium, manganese, aluminum, and titanium. To increase its stability and its activity in freeing gases from acetylene, oxygen, and nitrogen oxides, the oxides of zinc, chromium, and copper are taken in the proportions $ZnO : Cr_2O_3 : CuO = 1.0$ to 0.05 : 10.0 to 0.03 : 10.0. Each admixture of the oxides

Card 1/2 UDC: 66.097.3:66.074.3

ACC NR: AP7001364

of magnesium, manganese, aluminum, and titanium may constitute 0.05--15.0% of the basic catalyst composition. Prior to its use, the catalyst may be treated with a hydrogen-containing gas at a temperature of 225--275C.

SUB CODE: 07/ SUBM DATE: 14Apr64

Card 2/2